

A RAND NOTE

ACTIONS AGAINST NONNUCLEAR ENERGY FACILITIES:
SEPTEMBER 1981 - SEPTEMBER 1982

Gail Bass
with the assistance of Bonnie Jean Cordes

April 1983

N-1980-SL

Prepared for

The Sandia National Laboratories

35th
Year



Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE APR 1983		2. REPORT TYPE		3. DATES COVERED 00-00-1983 to 00-00-1983	
4. TITLE AND SUBTITLE Actions Against Nonnuclear Energy Facilities: September 1981 - September 1982				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) The Rand Corporation, Santa Monica, CA, 90406				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES This report replaces ADE751098					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 42	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

The research described in this report was sponsored by the Sandia National Laboratories under Contract No. 31-6098.

The Rand Publications Series: The Report is the principal publication documenting and transmitting Rand's major research findings and final research results. The Rand Note reports other outputs of sponsored research for general distribution. Publications of The Rand Corporation do not necessarily reflect the opinions or policies of the sponsors of Rand research.

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PREFACE

This Note was produced as part of an ongoing investigation, sponsored by Sandia Laboratories, of the potential threat to U.S. energy programs, both nuclear and nonnuclear. It reports on attacks and crimes against nonnuclear energy facilities in the United States and abroad between September 1981 and September 1982. A previous unpublished working paper, "Chronology of Actions Against Nonnuclear Energy Programs in the United States and Abroad," by Bonnie Jean Cordes and Geraldine Petty, October 1981, covered such incidents prior to September 1981. A companion document, Rand Note N-1979-SL, *A Review of Recent Trends in International Terrorism and Nuclear Incidents Abroad*, by Gail Bass and Brian Michael Jenkins, April 1983, reports incidents of international terrorism and nuclear incidents abroad during 1980 and 1981, analyzing them for possible signs of an increasing threat to nuclear and other energy facilities in the United States.

SUMMARY

This Note reviews incidents involving nonnuclear energy installations in the United States and abroad from September 1981 to September 1982. Its purpose is to identify trends that may signal potential threats to energy facilities in the United States.

The Note includes a chronology of 99 incidents, nearly two-thirds of which were attacks on facilities for generating and transmitting electrical energy. Fifty-seven of these incidents were perpetrated by anti-government leftist guerrillas in Latin America, especially El Salvador. Another 19 incidents were related to the Iran-Iraq war and represented attempts by the combatants and their partisans in the region to interfere with the enemy's production and distribution of oil. During this period, few energy-related incidents occurred in the United States. The few that did take place were economically rather than politically motivated and included extortion threats and theft of oil. Incidents both in the United States and abroad should serve as warnings of the vulnerability of modern energy systems.

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I. INTRODUCTION

This Note presents a chronology of attacks and crimes against nonnuclear energy facilities in the United States and abroad from September 1981 to September 1982.¹ Rand's information concerning these incidents has been gathered from open sources, including U.S. newspapers and magazines, foreign newspapers, and reports of the Foreign Broadcast Information Service (FBIS).

Rand began compiling its chronology of incidents involving nonnuclear energy facilities in 1980. Some incidents from prior years were entered at that time, but the record for the years before 1980 is incomplete.² Table 1 shows the numbers of incidents recorded in the chronology and the geographical regions in which they occurred. The totals for the last few years suggest that attacks on energy facilities are becoming more common. Whereas 27 such incidents were reported in 1980, 85 incidents were reported in 1981. The 58 incidents recorded for January 1982 through September 1982 suggest that the total number of incidents in 1982 will approach the number recorded in 1981.

Between September 1981 and September 1982, 99 incidents involving energy facilities occurred in 24 different countries. Of these, 63 were attacks by terrorists or guerrillas against electrical generation and transmission facilities, mostly in Latin America (57 incidents), but also in Canada, Spain, France, and South Africa. Also common in the past year were attacks on oil facilities, including pipelines and tankers, mostly in connection with the Iran-Iraq war.

There were no politically inspired energy-related attacks in the United States in 1982, although reported extortion threats against offshore oil facilities and oil thefts from storage tanks indicated a growing problem.

¹ A previous unpublished working paper reported on such incidents up to September 1981.

² Since the chronology is based on press sources, incidents not reported in the press are not included. We assume that some incidents of extortion and sabotage against energy facilities did occur but were not made public.

Table 1

ACTIONS AGAINST ENERGY FACILITIES IN THE UNITED STATES AND ABROAD:
SEPTEMBER 1981-SEPTEMBER 1982

Year	North America	Europe	Latin America	Asia	Mideast, North Africa, Persian Gulf	Sub- Saharan Africa	Total Incidents
1960			1				1
1965					1		1
1968					1		1
1969	1						1
1971		1			4		5
1972		4			1		5
1973			1		5		6
1974	1		2	1			4
1975	8				1		9
1976	3					1	4
1977	7	1	7		2	1	18
1978	6	1	5	1	2	3	18
1979	1	3	2	1	5	3	15
1980	4	6	4	1	9	3	27
1981	6	13	52	3	6	5	85
1982	5	3	31	1	16	2	58
Total	42	32	105	8	53	18	258

Trends in incidents involving nonnuclear energy facilities and selected events of interest are discussed at greater length in the following sections.

II. TARGETING ELECTRICAL INSTALLATIONS

Power stations, transformers, high-tension lines, and towers have become increasingly popular targets for anti-government rebels in many parts of the world. As noted in *Executive Risk Assessment* (May 1982), "instead of expending manpower and explosives in attacks against several industrial plants or governmental installations, most terrorist groups have learned that destruction of the appropriate power facility or transmission line will cripple the target as effectively as any number of terrorist bombs. In short, one successful operation against an electrical utility can equal five or ten against individual targets."

The most concerted such campaign has been waged by guerrillas in El Salvador. In the past year, at least 26 attacks were carried out against electrical installations in El Salvador, causing lengthy blackouts in much of the eastern part of the country and in the capital, San Salvador.¹ In some cases, water lines and telephone lines were also targeted; in other cases, interruption of electrical power prevented the pumping of water to populated areas. Most of the attacks were bombings, but bazookas and standoff weapons were used against the hydroelectric complexes on the Lempa River.

This aspect of political violence spread beyond El Salvador's borders in July 1982, when Honduran guerrillas dynamited two electrical substations to protest the engagement of the Honduran army to assist the Salvadoran army in its civil war. The attacks caused a week-long blackout in the capital, Tegucigalpa; all internal and external communications were disrupted, and newspapers were not issued for two days.

Between September 1981 and September 1982, terrorists made 10 attacks against electrical facilities in Peru and 6 in Chile. In August 1982, the radical Maoist group Sendero Luminoso² simultaneously bombed

¹ It is probable that there were even more such attacks which were not reported in the news media monitored at Rand.

² The name of the group, which means "shining path," seems ironic in the context of these activities.

five high-tension power lines outside Lima, cutting off electricity to the capital and other cities in the interior for two days, affecting 9 million people--half the nation's population. During the blackout, the terrorists bombed the Justice Palace, the Economy Ministry, and the government's Housing Bank; they also planted bombs at the Foreign Relations Ministry, which were found and deactivated. This practice of attacking electrical power and telecommunications lines and then hitting other targets has also been used in El Salvador, Guatemala, and Spain (*Executive Risk Assessment*, May 1982). Such a strategy obviously impedes the authorities' response to the multiple emergencies.

Of special interest to U.S. energy officials is the increasing number of attacks against electrical facilities in Puerto Rico. Four times in the last year, members of the terrorist Macheteros ("machete wielders") bombed power stations in San Juan, causing blackouts in over 20,000 homes. In November 1981, the tourist district was the target, chosen, according to the group, because it "is where the millionaires live." The bombing was in retaliation for the Puerto Rico Electrical Power Authority's refusal to supply power to a squatters' village 20 miles from the capital.

In Spain, the continuing Basque separatist guerrilla campaign to block the construction of nuclear reactors in Lemoniz by the Iberduero utility company included eight bombings of electrical facilities in the past 12 months. After the May 1982 murder of the project's director and chief engineer (his predecessor was kidnapped and killed by ETA terrorists in 1980), the plant's technical staff resigned and construction has been halted, apparently permanently. It remains to be seen how the terrorists' apparent "success" in stopping the Lemoniz reactors will affect their campaign against the utility's electrical facilities.

Because these attacks on electrical installations have occurred in countries with ongoing civil wars or high levels of political violence and were perpetuated by known leftist or separatist organizations, they may seem remote in the context of the United States. But a recent incident in Canada, apparently motivated by environmental concerns, may be more directly relevant.

British Columbia Hydro's controversial Dunsmuir power station, opposed by environmentalists and conservationists as unnecessary and too expensive, has inspired protests, court action, and vandalism at construction sites over the past two years. On May 31, 1982, saboteurs blew up at least \$5 million worth of equipment under construction in a remote area of Victoria. Bombs were expertly placed at the base of four shunt reactors--worth \$1 million each--destroying three and seriously damaging the fourth. The perpetrators entered the site through a hole cut in an 8-foot-high security fence topped by barbed wire. Someone called a Vancouver radio station to claim credit, saying that an underground protest group of 37 people planned the action and was also responsible for damaging a similar reactor on Texada Island the previous week, which utility officials thought had been hit by lightning. The caller cited opposition to British Columbia Hydro's herbicide spray program on the island as motivation for the sabotage.

On June 2, the *Vancouver Sun* received an unsigned letter claiming responsibility for the latter attack. The letter, headed with the word "Direct Action," stated:

We reject both the ecological destruction and the human oppression inherent in the industrial societies of the corporate machine in the West and the Communist machine in the East. We also oppose the human oppression resulting from the economic and political systems throughout the world that are based on power and profit. We must make this an insecure and uninhabitable place for capitalists and their projects. This is the best contribution we can make towards protecting the earth.

It is not known whether there are any links between the group claiming responsibility for this attack and the French terrorist group Action Directe. It is possible that the Canadian saboteurs merely borrowed the name, feeling an ideological identification with their French namesakes, whose past actions have also indicated anti-corporate and anti-high-technology attitudes.³

³ In October, a group also calling itself Direct Action sent a lengthy letter to a left-wing newspaper, claiming responsibility for bombing the Toronto plant of Litton Systems, where guidance systems for American cruise missiles are made. The explosion injured seven people and caused damage estimated at \$5 million.

III. TARGETING OIL INSTALLATIONS

Thirty-six of the incidents reported between September 1981 and September 1982 involved oil or gas facilities. Several of these attacks were perpetrated by leftist terrorists in Latin America. Guerrillas in Colombia attacked the state-owned oil pipeline on three occasions in November 1981 and in the same month attacked an oil exploration camp, killing a geologist employed by the U.S.-owned Western Petroleum Company, whom the terrorists accused of being an "army informer."¹ An attempt to blow up an oil pipeline in Chile in December 1982 went unclaimed.

Acts of sabotage were also carried out against oil installations in Africa. In May 1982, several explosions badly damaged a fuel depot in the eastern Transvaal province, near the Mozambique border. The following month, an oil pipeline used to convey oil from Durban, South Africa, to the reef was damaged during the night by explosives. No one claimed credit for the bombing. However, South African officials have often accused Mozambique of allowing black nationalist guerrillas of the African National Congress (ANC) to launch sabotage attacks from bases inside the Marxist-ruled country.²

In the same region, in November 1981, the Union for the Total Independence of Angola (UNITA) bombed a Belgian-owned oil refinery in Luanda, Angola, as part of its struggle to destroy the economic base of the current Marxist government, which earns 80 percent of its foreign exchange from oil exports. The destruction of one of the three distillation units of the country's only refinery put the refinery out

¹ The M-19 guerrilla group was responsible for two of the pipeline attacks and the raid on the camp. The third pipeline was bombed by a guerrilla command of the People's Liberation Army (EPL).

² In June 1980, the ANC claimed credit for the worst industrial sabotage incident in South Africa's history, coordinated attacks on two strategically vital SASOL oil-from-coal plants and an oil refinery, which resulted in \$7.2 million damage. Officials concluded that the attackers must have had expert intelligence on the layout of the plants and the security measures in effect, indicating the increasing sophistication of the group.

of operation for several months. Angolan rebel leader Jonas Svimbi took responsibility for the attack and said it demonstrated the strength of his forces, who are backed by South Africa. South Africa denied the charge. A captured notebook exhibited by the Angolans contained information about the layout of the refinery, written in both English and Afrikaans. Western diplomats believe the attack was carried out by white mercenaries on behalf of the rebel organization. One of the saboteurs, a white man, was blown up while laying in a mine. This incident demonstrates the ability of terrorist groups to increase their technical sophistication through the use of technically skilled mercenaries.

While the claim of official South African sponsorship of saboteurs in Angola is unconfirmed, numerous government-sponsored attacks on oil installations have taken place in the Middle East in recent months. Iraq and Iran have repeatedly targeted each other's oil facilities. In August and September 1982, Iraqi warplanes persistently bombed Iran's Kharg Island oil terminal. Iraq warned foreign freighters and oil tankers to stay away from the Iranian island; in September, Iraqi officials claimed that their navy and air force had sunk four ships, including two oil tankers, that ignored the warning and were headed toward Kharg. It is estimated that Iran's export of crude oil dropped from 1.8 million to 700,000 barrels a day in August, primarily because of tankers heeding the Iraqi warning.

According to Iranian reports, Iranian rocket attacks in September inflicted heavy damage on the Iraqi offshore oil terminal of Khor al-Umayyah. Moreover, oil-related violence in connection with the Iran-Iraq hostilities was not confined to the combatant countries. The oil pipeline carrying Iraqi crude to the port city of Tripoli was bombed several times in January and March, presumably by pro-Iranian Lebanese Moslem factions. Several rocket attacks were also launched against tankers loading Iraqi crude at the Lebanese port. Twice in January, explosions damaged pipelines in Turkey carrying Iraqi crude oil to the Turkish Mediterranean coast. The armed forces of Iraq and Iran and their partisans elsewhere in the region clearly consider the enemy's oil installations to be vital targets in their continuing conflict.

IV. ENERGY-RELATED INCIDENTS IN THE UNITED STATES

The energy-related incidents reported in the United States in 1982 were all economically rather than politically motivated. Several publications have reported a growing problem of thefts of oil, oil and gas field equipment, and royalties from well leases.¹ According to the Commission on Fiscal Accountability of the Nation's Energy Resources, an estimated 2 to 6 percent of all crude oil produced in the United States is stolen. This means that every day \$18 million worth of oil (500,000 barrels in 1981 prices) is lost to thieves. Because of equipment shortages in the industry, theft of expensive drilling equipment is also common. Oilmen and law-enforcement officials agree that most of the thieves are or were insiders in the industry. Consequently, some thefts are difficult to detect because records are altered to cover up criminal activity. Efforts are currently under way in California, Texas, and Louisiana to improve security at oil fields and to catch and prosecute offenders.

In October 1981, Sun Oil and Union Oil Company of California reported bomb threats and extortion attempts against offshore oil platforms in Santa Barbara. Although no bombs were found, the potential lethality of sophisticated extortionists should not be underestimated. In September 1982, five bombs were discovered at a Gulf Oil petrochemical plant in Texas, causing temporary closure of the facility. The company had received a threat warning that 10 bombs would be set off unless \$15 million were paid within five days. The threat letter gave the location of one bomb and said four others could be found easily. The bombs were described by the FBI bomb squad as very sophisticated and modern, costing perhaps \$18,000 to \$20,000 each to build.

¹ *Los Angeles Times*, January 22, 1982; *Security Systems Digest*, February 10, 1982.

V. CONCLUDING REMARKS

Because most of the energy-related terrorist incidents in the past year occurred in connection with Latin American political turmoil and the Iran-Iraq war, there may be a tendency to become somewhat complacent about the potential threat to energy facilities in the United States, where indigenous political violence has subsided in the post-Vietnam era. But even the experiences of countries in the most unstable regions of the world should serve as warnings of the vulnerability of modern energy systems. Recent bombings by Direct Action in Canada show that issue-oriented extremists may find energy facilities attractive targets. The increasing sophistication of economically motivated extortionists should concern energy security officials, particularly because extortion schemes involving energy facilities are likely to be both publicized and imitated.

Appendix

CHRONOLOGY OF NONNUCLEAR ENERGY INCIDENTS IN THE UNITED STATES AND ABROAD: SEPTEMBER 1981 - SEPTEMBER 1982

September 15, 1981

Spain. Guerrillas believed to be Basque separatists blew up a power substation, cutting off electricity to most of the Pamplona area in northern Spain. The power cut affected about 200,000 people. The substation belonged to Iberduero, a power company that is building a controversial nuclear plant at Lemoniz, near the Basque town of Bilbao. The attack came a few hours after riot police fired rubber bullets to break up groups of demonstrators demanding amnesty for detained Basque guerrilla suspects.

September 23, 1981

Peru. A terrorist attack against an electrical substation in Lima was averted when a lieutenant and a guard took the unidentified perpetrators by surprise in the act of setting charges of dynamite. The lieutenant deactivated the fuses in time, but the perpetrators escaped by car.

September 30, 1981

Chile. Unknown persons in a taxi fired gunshots at gasoline tanks in Vina Del Mar. The group shot at a Shell Oil Company tank holding 10,000 liters of premium gasoline, but the shots hit a rail on the side of the tank and caused no damage. Later, the vehicle used in the attack was found. The car's owner explained that he had been held up, bound, and put inside the car's trunk.

October 1981

United States. As reported in the October issue of *World Oil*, Sun Oil and Union Oil Company of California have experienced bomb threats and extortion attempts concerning offshore Santa Barbara, California, platforms. No bombs were found in any of the cases, nor did any money change hands.

October 1, 1981

Kuwait. The government of Kuwait accused Iran of bombing and setting ablaze a major oil installation, but Iran called the report a U.S. plot to discredit its Islamic regime. The incident was the fourth reported bombing of Kuwaiti territory by Iran since the Iran-Iraq war broke out more than a year ago. Authorities in Kuwait reported that there were no casualties and that the fire set at the bombed Umm Aysh facility, north of the city of Kuwait and about 30 miles from the Iranian refinery center of Abadan, was quickly brought under control. Three Iranian air

force planes were reportedly involved in the raid. The U.S. State Department stated that four American airborne warning and control system planes stationed in Saudi Arabia tracked the Iranian jets as they made their bombing run on the Kuwaiti target.

October 2, 1981

Iraq. Iranian warplanes bombed four Iraqi hydroelectric power stations in what Tehran said was retaliation for Iraqi air and ground attacks on "civilian" targets near the oil-refining center of Abadan. Iran said the airstrikes caused extensive damage to installations in the north and south of Iraq. Three of the raids were against targets near the Iranian border, and the fourth hit a small plant in the oil-producing region near Kirkuk, 50 miles into Iraq. Initial U.S. estimates were that the raids would not seriously affect Iraq's power-generating capabilities, since each of the installations hit is believed to have adequate backup systems.

October 9, 1981

Bolivia. Damage to the high-pressure pipeline that feeds the most important hydroelectric plant in the city of La Paz, believed to have resulted from an explosion by terrorists, caused a one-hour blackout. Technicians of the Bolivian Electricity Company noted that the explosion almost damaged the generator room, which would have caused even greater problems.

October 10, 1981

Spain. A bomb thought by police to have been planted by Basque separatists partially destroyed a power transformer in Pamplona, leaving a large part of the city without electricity over the weekend. The transformer belongs to a subsidiary of the Iberduero power company, which is building a nuclear power plant outside the Basque city of Bilbao. The Basque separatist group ETA has bombed scores of Iberduero stations to protest the nuclear project.

October 23, 1981

Peru. A high-tension pylon was knocked out by a powerful explosive charge placed by terrorists, leaving the city of Cerro de Pasco, northeast of Lima, without electricity or water.

October 23, 1981

South Africa. A bomb blast damaged a power transformer in the industrial area of the coal-mining town of Witbank, 95 miles northeast of Johannesburg. The blast was caused by a magnetic mine and did slight damage.

November 1981

Spain. A civil guard lost both hands when he picked up a booby-trap torch bomb, following a raid by Basque terrorists on a power station near Pamplona. The power station was seriously damaged in the attack.

November 1981

El Salvador. Guerrillas launched 150 attacks against high-tension lines and towers between January and November 1981, resulting in power outages and reductions for the departments of Usulután, San Miguel, Morazan, and La Unión. (*Executive Risk Assessment*, November 1981.)

November 1981

El Salvador. Hydroelectric complexes on the Lempa River and high-tension lines were attacked by guerrillas. Bazookas and standoff weapons were used for the first time in these assaults, though the facilities have been frequently attacked in the past.

November 4, 1981

El Salvador. Actions by FMLN guerrillas halted power, water, and telephone service for two days. The guerrillas blew up utility poles, water lines, and telephone lines in Suchitoto, 44 kilometers north of San Salvador.

November 8, 1981

Spain. ETA attempted unsuccessfully to bomb an electrical power plant in the Basque province of Vitoria.

November 9, 1981

Spain. Only 24 hours after the failed operation in Vitoria, ETA bombed an electrical plant in Ormaestegui, causing substantial damage to a transformer installation of Iberduero, Spain's primary electrical producer. ETA attacks in recent years on the facilities of the company have resulted in losses exceeding \$10 million.

November 11, 1981

Puerto Rico. Members of the Machetero terrorist organization bombed a San Juan substation, causing a blackout for over 20,000 homes.

November 14, 1981

France. The Golfech Antinuclear Army claimed responsibility for a blast that destroyed a power transformer in the city of Agen. Half the area's residents were left without power. An anonymous caller to AFP said the blast was "a warning.... From here on we will strike at city centres." There was no explanation of the group's reasons for the attack.

November 15, 1981

Spain. A bomb destroyed an electric transformer in the Basque town of Villabona. There were no casualties. Responsibility for four previous

explosions at electric transformers in the Basque region in the same week was claimed by ETA. The power transformers belonged to Iberduero, the principal contractor for the nuclear plant at Lemoniz.

November 20, 1981

Colombia. Guerrilla attacks by M-19 were carried out against the state-owned oil pipeline in southwest Colombia, causing heavy damage and significant losses in oil production.

November 22, 1981

Colombia. A guerrilla command from the People's Liberation Army (EPL) detonated a bomb in one section of the pipeline that runs between the Barrancabermeja oil center and Medellin. The explosion caused \$50,000 damage.

November 24, 1981

El Salvador. Using a battle between rebel forces and National Guardsmen as a diversion, another rebel force burned down power lines to San Miguel. Power was restored late on November 27.

November 25, 1981

Colombia. Guerrilla attacks were carried out by M-19 against the state-owned oil pipeline in southwest Colombia, causing heavy damage and significant losses in oil production. Twenty guerrillas damaged the electric plant that supplies energy to Orito and Puerto Asis, then opened the valves of the oil pipeline that links both towns, spilling 200 barrels of crude oil. This was the second attack in a matter of days, demonstrating the group's continuing capability. Military patrolling of the pipeline was ordered after the incident.

November 25, 1981

Peru. Unidentified persons blew up a gigantic tower in Huancayo, in the central Andes, leaving that province without electricity. This was the fifteenth attack perpetrated in Peru since 28 July 1980, when democracy was reestablished by President Fernando Belaunde Terry. The material damage has been estimated at \$1.2 million.

November 26, 1981

Peru. Three large neighborhoods on the outskirts of Lima were without electricity for several hours after unidentified persons blew up a high-tension tower, the second such attack in 24 hours. According to officials, a group of people detonated an explosive device in a tower of the distribution line that carries electricity to southern Lima.

November 26, 1981

Colombia. M-19 guerrillas attacked an oil exploration camp near Orito. Nelson Rodriguez Pinillas, a geologist employed by the U.S.-owned Western Petroleum Corporation, was assassinated during the action. He was accused of being an "army informer."

November 27, 1981

Puerto Rico. Members of the Macheteros claimed responsibility for the pipe bombings of two power stations in San Juan's tourist district. The area was targeted because that "is where the millionaires live." The 9-mm explosions blacked out most of the central area of the city, and officials said it could take up to two days to restore power. The Macheteros, or "machete wielders," said they bombed the facilities to support "brave and needy squatters" fighting eviction from Villa Sin Miedo in a town 20 miles from the capital. The bombing of the two Puerto Rico Electric Power Authority substations was in retaliation for the utility's refusal to supply power to the squatters' village. A third pipe bomb was discovered by utility authorities at another substation but was dismantled before it could detonate. A fire that followed one of bombings raged out of control for 45 minutes. Damage was estimated at over a \$1 million. The Condado hotel area and a well-to-do residential area of Santurce were without electricity for most of the night, while the commercial district did not have power restored for several days.

November 28, 1981

El Salvador. Shortly after restoration of power that had been cut off by a previous bombing of power lines to San Miguel, guerrilla bombs near the area knocked out the power once more. (See November 24, 1981.)

November 29, 1981

Peru. Two 15-meter high-tension towers in the Tacna area were destroyed in the night by bombs. The director of Electroperu announced over the radio that great effort was being made to reestablish the electrical supply to the city.

November 29, 1981

Angola. The Union for the Total Independence of Angola (UNITA) bombed a Belgian-owned oil refinery in Luanda as a part of a struggle to destroy the economic base of the current Marxist government, which counts on oil production for 80 percent of its foreign exchange earnings. The sabotage team managed to destroy one of the three distillation units of the country's only refinery, which put the refinery out of operation for at least two months.

Angolan rebel leader Jonas Svimbi took responsibility for the attack and said it demonstrated the strength of his forces, who are backed by

South Africa. South Africa denied the charge. Western diplomats who examined evidence presented by the Angolan authorities the day after the raid said they believe the National Union did carry out the attack, using white mercenaries. A captured notebook exhibited by the Angolans contained information about the layout of the refinery written in both English and Afrikaans. One of the saboteurs, a white man, was blown up while laying a mine. It was probably because of the explosion in which he died that his colleagues fled, leaving much of their equipment behind.

The Angolan government said the sabotage squad had intended to blow up the whole refinery. Had the operation gone according to plan, a gigantic explosion would not only have devastated part of Luanda, but could also have released a cloud of poisonous gas over the capital.

A report issued in March claimed that three months after the attack the refinery was back in operation. The oil-producing nation had to import refined products in the interim to meet the national demand.

December 1981

United Kingdom. British and Norwegian anti-terrorist units were put on alert following a warning that Palestinian terrorists planned to blow up a North Sea oil installation. An anonymous caller told police a rig would be blown up, and a voice analysis of a recording of the call indicated the caller was an Arab. Operators of all oil rigs on the Norwegian and British continental shelf were alerted and were instructed to search for bombs. No evacuations were ordered.

December 8, 1981

Chile. Four terrorists attempting to scale the fence of an electrical substation were halted by security personnel. A battle with machine guns and bazookas ensued, but the terrorists escaped.

December 9, 1981

Chile. Unidentified individuals tried to blow up the oil pipeline near Quilpue. An explosion ruptured one valve of the pipeline, and about 15,000 liters of oil were spilled.

December 11, 1981

Peru. Unidentified persons dynamited a high-tension tower in the village of Huaral, 120 kilometers north of Lima. The metal structure was toppled.

December 13, 1981

El Salvador. Terrorist actions against the electric power system in San Miguel paralyzed the city for more than a week. Residents and businesses were without electricity and had problems with food and water, while industries were halted completely.

December 16, 1981

El Salvador. Rebels blasted two power lines north of San Salvador, cutting off power to the capital and nearby towns. Four transmission towers in the eastern part of the country were also brought down by insurgents.

December 17, 1981

Bahrain. Saudi Arabia and Bahrain announced the week-old arrests of 65 people in what was said to be a plot linked to Iran to disrupt conditions in the Persian Gulf region and bring down conservative Arab governments. Security officials in Bahrain said authorities there had arrested 52 Arab nationals, among them Saudis, Kuwaitis, Iraqis, and citizens of the United Arab Emirates, on charges of planning to carry out sabotage against vital installations and ranking defense, security, and government officials. A Bahraini government spokesman said the arrestees had confessed that they had been trained in Iran and that their objective was to engage in sabotage on 17 December, the date of the 10th anniversary of the independence of the island nation. A large quantity of weapons and the equivalent of \$125,000 were reportedly seized in the possession of those arrested. Saudi Arabia claimed to have made 13 more arrests as a result of information revealed by the men captured in Bahrain. Some Arabic newspaper accounts suggested that the ultimate objective was to bring Bahrain under Iranian rule. Iran had claimed Bahrain as an integral part of its territory until 1971.

Five armed Iranians delivered a statement to the Bahraini embassy in Teheran shortly after the arrests, demanding the release of the group held by the Bahraini authorities. The five Iranians claimed responsibility for the "planned subversion in Bahrain" and said they and the men seized there were members of an Iraqi Moslem fundamentalist group, Al Dawa, which means "the call."

December 21, 1981

Spain. Suspected Basque terrorists toppled one electric pylon and damaged a second with plastic explosives, causing an estimated \$40,000 damage. The attack was the latest in a long campaign against the Iberduero power company.

December 22, 1981

El Salvador. Dynamite attacks against a number of high-tension towers cut off electrical service in a wide zone of the metropolitan area of San Salvador and in several towns in the central and eastern parts of the country.

December 24, 1981

El Salvador. Seven guerrilla bombings of high-tension and telephone lines broke an unofficial Christmas truce. The attacks blacked out three cities north and east of the capital. Repairmen worked around the clock to restore power to Aguilares, Suchitoto, and Cojutepeque.

December 25, 1981

El Salvador. Early on Christmas morning, rebels near Suchitoto brought down two more roadside electrical towers.

January 1982

El Salvador. Leftist guerrillas destroyed a \$1 million power plant as part of a campaign of economic sabotage that apparently has reduced government revenues. Members of government workers' unions and members of the armed forces complained that they received no salary checks for December. In their latest attack against the ruling junta, guerrillas blew up a high-voltage regulator, destroying the power plant that served an industrial park in San Salvador.

January 1, 1982

El Salvador. Rebel bombings of electrical installations caused a 2-hour blackout on New Year's Day. The coordinated attacks began just after midnight and temporarily cut electricity to San Salvador and most major cities.

January 2, 1982

Lebanon. A Lebanese-registered oil tanker, the Babanaft, was rocketed while loading Iraqi crude at an oil terminal in the northern Lebanese port city of Tripoli. The tanker sailed out of the range of fire, but the shelling had caused a fire on the ship's deck, which was quickly extinguished. One oil storage tank on the 20,778-ton ship had been hit and was set ablaze. The tanker sailed to Greece to undergo repairs. No group claimed responsibility for the bombing, but it may have been related to the frequent clashes between pro-Iranian and pro-Iraqi Lebanese Moslems that have occurred since the two countries went to war in September 1980.

January 3, 1982

Lebanon. The pipeline that carries Iraqi crude oil to the Lebanese Mediterranean coast was blown up by an explosion. A huge fire was started that raged for hours. Pumping of oil was discontinued pending repairs on the damaged pipe. The pipeline pumping had been resumed only a week earlier after an interruption of six years due to the Lebanese civil strife and later to the Iraq-Iran war. Pro-Khomeini activists were suspected of engineering the attack. The Iraqi government was planning to increase its oil exports from Tripoli by 200,000 barrels a day because of its need for additional funds to finance the war with Iran, then in its second year.

January 4, 1982

Lebanon. The second explosion in two days blasted the oil pipeline carrying Iraqi crude to the port city of Tripoli. The explosion, which

took place only 3 miles from the Syrian border, caused a fire at an oil refinery and shut down the flow through the pipeline. The pipeline had been rocketed by saboteurs, and a pro-Iranian group later claimed responsibility.

January 6, 1982

Turkey. An explosion was reported in the Iraq-Iskenderun pipeline which carries crude oil from Kirkuk to the Mediterranean terminal of Yumurtalik. The explosion occurred 7 kilometers from Idil, a town in Mardin Province, and teams were investigating the cause. Oil was leaking out of the damaged section of the pipeline.

January 7, 1982

Peru. A high-tension tower was dynamited in the night by terrorists, leaving the city of Jauja in the central region of the country, without electricity.

January 8, 1982

Turkey. An Iraqi oil pipeline was cut by an explosion for the second time in a week. Turkish authorities said the 625-mile pipeline that brings Iraqi oil to Turkey's Mediterranean coast exploded 42 miles inside the Turkish border and sabotage was suspected. Explosions on Iraqi lines have damaged the country's efforts to increase its oil exports.

January 13, 1982

Austria. The Austrian newspaper *Kurier* passed information to the State Security Police concerning a report it had received from Yugoslavia, which claimed that a group of terrorists had planned a bomb attack on an Austrian power plant. According to the report, the terrorist group was headed by the notorious "Carlos." The targeted power plant was not identified, but some technical data were made available which led authorities to suspect that it was the Kaprun hydroelectric plant in the Salzburg region. The Interior Ministry immediately instructed the police to take additional measures to protect the plant.

According to information from Yugoslavia, the terrorist group stayed for days at a hotel unit in southern Yugoslavia that had been especially rented for the purpose. The attack was scheduled for 7 February. The organization, financed by Qaddafi, had allegedly hired a Frenchman as an explosives expert. Authorities suspect that the planned attack might have been related to the upcoming trial of the terrorists being held for an attack on the Viennese synagogue.

January 21, 1982

Guatemala. Leftist guerrillas blew up an electricity transmission tower near Santa Cruz, the provincial capital, during the night, blacking out the entire northwestern province of Quiche. The police said government

power workers repaired the damage and restored service to Quiche's half-million people by midnight, four hours after the blast.

January 29, 1982

United States. A grand jury in Texas indicted two corporation presidents, a restaurant owner, and 14 other people on charges stemming from a three-month investigation of oil field theft reports. Police said they had spent three months watching truckers dropping load after load of crude oil at a restaurant last year. The truckers were charged with picking up more oil than authorized at area wells and delivering the overage to the Giddings restaurant. Allegedly, most of the oil was stolen from the 1,291 producing wells in Burleson County, and the 17 indictments, involving perhaps \$200,000 worth of stolen oil, only touched the surface of the criminal activity occurring around the rich Austin Chalk field.

February 9, 1982

Guatemala. At least 10 bombs exploded in the night in the capital, Guatemala City, leaving 90 percent of the city without power for an hour and a half. Sporadic gunfire could be heard in the streets. The attacks took place less than 24 hours after Guatemala's major leftist guerrilla groups announced they were joining forces. Police said the bombs also knocked out power in Antigua and Amatitlan. There were no reports of death or injuries. During the blackout, one of the bands of roving guerrillas fired rockets at two empty Texaco fuel storage tanks in the area but caused little damage.

February 19, 1982

El Salvador. A large group of guerrillas attacked buses and other public transport vehicles on a main highway in the Guazapa district. The passengers were held at gunpoint and stripped of their valuables. They were told that they would witness a demonstration of what the guerrillas were like. The guerrillas then proceeded to machine-gun and dynamite the telephone and power line posts. They toppled three power line posts and two telephone cable posts. The destruction of the power cables caused a blackout in an extensive sector of the north in the departments of San Salvador and Chalatenango.

February 23, 1982

Chile. Bomb attacks were perpetrated against several power substations, causing a blackout in Valparaiso and in the nearby resort of Vina del Mar. The synchronized attacks took place during the final ceremony of the 23rd Vina del Mar song festival, which was being televised throughout Chile and to other countries. Power company sources reported that although the attacks by alleged terrorist groups affected four power substations of the interconnected power supply system and caused an interruption in service, they caused little serious damage.

March 19, 1982

United States. A gunman stole a tank truck carrying 8,300 gallons of gasoline in Long Beach, California. The driver said he was about to fill a service station's underground tank when a man with a handgun accosted him, tied him to the bumper of a nearby parked vehicle, and drove the tanker away. The tanker was valued at \$120,000, the gasoline at \$11,000.

March 25, 1982

Lebanon. Saboteurs blew up a pipeline carrying Iraqi crude oil to Lebanon for the second time in three months. The explosion, just inside Lebanese territory, started a fire. Pumping was halted but resumed 10 hours later. No one claimed responsibility.

March 26, 1982

Peru. Armed terrorist commandos caused a blackout in the city of Ayacucho by machine-gunning and dynamiting several high-tension towers.

March 29, 1982

Peru. Terrorist commando teams attempted to take over the city of Ayacucho, causing a blackout by blowing up three high-tension towers. Ayacucho, a center of terrorism where a state of emergency and curfew have been imposed, was attacked by armed groups from four different points. The commandos simultaneously dynamited the three towers, leaving the city in complete darkness, and then fired their machine guns, attempting to enter the city. After three hours of fighting, police forces were able to drive them off.

April 1982

El Salvador. The city of San Vicente was attacked by an estimated 800 guerrillas twice during the first week in April. As a result of assaults on electrical facilities, substantial portions of San Vicente department were without electricity during the month, as were parts of Usulután and Morazan departments.

April 1982

Guatemala. During the month of April, Guatemalan terrorists from ORPA and EGP burned four gasoline stations in Guatemala City.

April 12, 1982

Spain. Part of Bilbao, in the Spanish Basque country, was blacked out during the night by a bomb attack against an electricity transformer. The 1.5-kilogram explosives used in the device were similar to material frequently used by the Basque separatist ETA military group. No organization claimed responsibility for the attack.

April 26, 1982

Sri Lanka. Three men intending to plant four small hand bombs in one of the country's main power-generating stations were arrested. They had easily entered the Kelanitissa power station carrying four "attack-stopper" bombs, which are common but considered very dangerous. According to police authorities, the youths are connected with a radical political party.

April 30, 1982

Puerto Rico. Members of the Machetero terrorist organization bombed a San Juan substation, causing a blackout for over 20,000 homes.

May 1, 1982

Chile. Six high-power bombs were set off at Valparaiso electrical installations, causing widespread blackouts.

May 3, 1982

Puerto Rico. Members of the Macheteros bombed a San Juan substation, causing a blackout for over 20,000 homes. Similar attacks in November and April had caused a total loss of \$2,500,000.

May 24, 1982

Canada. Damage discovered at a Texada Island installation was believed to have been caused by a lightning strike, until British Columbia Hydro's Dunsmuir substation was the target of a bombing attack on May 31. An unidentified caller to a Vancouver radio station claimed responsibility for the sabotage, as well as for the previous incident at the Texada Island substation. He said that an underground protest group of 37 had masterminded the explosions that destroyed the Dunsmuir substation, and that this was its second target, demonstrating its anger at Hydro's herbicide spray program on the island. The caller said the first hit was on a similar heavy reactor on Texada Island the week before, which Hydro had thought was struck by lightning.

May 28, 1982

Spain. ETA was responsible for blowing up an electrical transformer in San Sebastian, temporarily interrupting power within the city and surrounding areas. This action was the 300th operation against Iberduero facilities and personnel since 1978. Damages sustained by Iberduero since 1978 are now well in excess of \$30 million--including \$6 million at the Lemoniz reactor site alone.

May 28, 1982

South Africa. Several explosions badly damaged a fuel depot and electrical transformer in the eastern Transvaal province, near the Mozambique border. A police spokesman said sabotage was suspected in the blasts, which apparently caused no injuries. Damage was thought to

be considerable. South African officials repeatedly have accused Mozambique of allowing black nationalist guerrillas of the African National Congress (ANC) to launch sabotage attacks from bases inside the Marxist-ruled country.

May 31, 1982

Canada. Saboteurs blew up at least \$5 million worth of equipment at an electrical substation under construction in a remote area of Vancouver Island. Bombs had been expertly placed at the base of each of four reactors so as to inflict maximum damage to British Columbia Hydro's controversial Dunsmuir power station. Three of the massive steel reactors--each worth about \$1 million--were destroyed, along with a \$400,000 oil pumping plant and a 22-ton crane. A fourth reactor was seriously damaged. The blasts at the remote installation were heard simultaneously as one loud explosion by the nearest neighbors, nearly a mile away, at about 1 a.m. Whoever set the explosives entered the 70-acre enclosure after cutting a hole through a 2.5-meter-high security fence topped with barbed wire. The entry was undeterred because of the remote location of the installation. Workers discovered the damage at 8 a.m. The charges were set in the same location on each of the reactors, under the front control panel, against the steel base and between it and the concrete pad. The blasts ignited the cooling oil contained in the reactors, which were still burning days after the explosions.

The Dunsmuir substation is part of the Cheekye-Dunsmuir 500-kilovolt line planned to move power from the mainland to the Island after October 1983. The project, which was undertaken to end the brownouts and the power shortages that occur each winter, is controversial and has prompted protests, court action, and vandalism at construction sites for two years. Environmentalists and conservationists maintain that it is unnecessary and too expensive.

An unidentified caller to a Vancouver radio station claimed responsibility for the attack. He said that an underground protest group of 37 masterminded the explosions that destroyed the substation. The group claimed the Dunsmuir attack as its second action, demonstrating its anger at Hydro's herbicide spray program on the island. The caller said the first hit was on a similar heavy reactor on Texada Island the week before, which Hydro had thought was struck by lightning. (See May 24, 1982.)

On June 2, an unsigned nine-paragraph letter claiming responsibility for the explosive attack was received by the *Vancouver Sun*. The letter started with the words "Direct Action," leading some investigators to check out the coincidence of the use of the same name as that of a French group long thought to be inactive after massive arrests of its members in 1980, but recently responsible for bombing attacks against the International Monetary Fund and the World Bank in Paris. The name may have simply been borrowed. Generally, authorities suspected environmental protest groups.

The two-page typed statement from "Direct Action" read, "We reject both the ecological destruction and the human oppression inherent in the industrial societies of the corporate machine in the West and the Communist machine in the East. We also oppose the human oppression resulting from the economic and political systems throughout the world that are based on power and profit. We must make this an insecure and uninhabitable place for capitalists and their projects. This is the best contribution we can make towards protecting the earth."

Explosives experts estimated that 200 pounds of dynamite or its equivalent were used to destroy the inch-thick steel reactor bases. Investigators were looking into any disappearance of large amounts of explosives in Canada or the United States to obtain a clue as to the perpetrators. Security at the installation has been increased but not to the extent of having guards patrolling every line and substation. As one Hydro official described it, it is impossible to protect sites like Dunsmuir from determined saboteurs. "That fence only keeps out honest people. You'd need a small army to protect this."

May 31, 1982

Iran. Iraq claimed its warplanes bombed two of Iran's major oil facilities in retaliation for the shelling of civilian targets in Iraqi territory. An Iraqi military communique said the planes scored "effective hits" on Iran's Kharg Island terminal in the Persian Gulf and a refinery in the northwestern city of Tabriz. Tehran radio claimed that the Iranians had shot down an Iraqi jet during a dogfight over the Abadan oil refinery in southwestern Iran.

June 1, 1982

Persian Gulf. The Turkish tanker "Atlas I" was damaged while loading oil in the Gulf during an Iraqi air raid on Iran.

June 14, 1982

El Salvador. San Miguel was without power after two bomb blasts toppled electrical towers. Repair crews hoped to restore power to the city of 100,000 within 24 hours. Leftist guerrillas were suspected of blowing up the pylons.

June 28, 1982

South Africa. An oil pipeline used to convey oil from Durban to the reef was damaged during the night by saboteurs who set explosives at the railway pumping station in Scheerpersnek. Repairman worked around the clock to repair the damage, and after a short delay, the oil was flowing as usual. No one claimed responsibility for the bombing.

June 30, 1982

El Salvador. Approximately 50 leftist guerrillas dynamited a power installation, leaving large areas of El Salvador without electricity. Army fighter planes responded by bombing and strafing guerrilla

hideouts. The country's electrical society announced that rationing of power was to be put into effect, with priority being given to industrial installations. The guerrillas, including the FMLN, declared that they would expand their economic warfare throughout the country. Their attacks have been concentrated on energy installations and transportation vehicles.

July 5, 1982

Honduras. Dynamite attacks against two electrical substations were responsible for 16 deaths and a massive blackout in the capital, Tegucigalpa. Electricity and water supplies were halted and authorities were obliged to institute rationing of gasoline. The blackout was expected to last for at least a week, according to officials. All internal and external communications were disrupted, even the Honduran newspapers were not issued for two days.

According to workers at one of the plants, armed guerrillas arrived at the station with machine guns, locked up the workers, and set the explosives. A simultaneous operation took place at the other plant in the eastern part of the capital. The workers were evacuated, and the charges detonated, blacking out 99 percent of the capital. The cost of the equipment destroyed in the Sant Fe electrical plant and the substation in Suyapa was estimated at \$3 million.

A group called "Froylan Turcios" claimed the attack, protesting the engagement of the Honduran army in the civil war in El Salvador. Honduran troops were spotted crossing the border to aid the Salvadoran army in its struggle against leftist guerrillas. The name of the group comes from an early twentieth century Honduran writer of leftist leanings.

July 6, 1982

El Salvador. Continuing attacks by leftist guerrillas against power stations left the departments of San Miguel, La Union, and Usulután and the Morazan area with damaged electrical networks and sporadic power cuts.

July 16, 1982

Iran. Iraq claimed that its planes bombed Iran's Kharg Island, "inflicting direct and effective hits" on oil shipping installations. The raid was described as a "reiteration of our previous warnings" to foreign freighters and oil tankers to stay away from the Iranian island, 150 miles south of the Iranian refining center of Abadan.

July 19, 1982

El Salvador. Leftist guerrillas blew up a power line on the northern outskirts of San Salvador, knocking out electricity, in their continuing battle against the ruling junta.

July 22, 1982

Chile. A group of five extremists approached a substation in Valparaíso in the early evening, threatened the personnel on watch with firearms, and placed three explosive charges which destroyed two transformers and caused a blackout for the entire region.

July 29, 1982

El Salvador. Leftist rebels dynamited several high-voltage lines, blacking out two major cities in the eastern part of the country where troops had been fighting guerrillas for four days. San Vicente and Zacatecoluca had no electricity after the early morning attacks. Army patrols backed by aircraft and artillery continued combing the southeastern province of Usulután, trying to flush out guerrillas who had repeatedly attacked buses, trucks, and private cars.

July 31, 1982

El Salvador. Leftist guerrillas blew up two electric towers, blacking out San Salvador and much of northern and eastern El Salvador, but power was restored in most areas within 14 hours. The rebels also seized two radio stations for 15 minutes and broadcast messages attacking the government and the United States. In eastern El Salvador, a large army force withdrew after a several-day sweep against insurgents. Military commanders called the operation a success, but guerrillas were reported still operating in the area.

August 5, 1982

El Salvador. More than 1.5 million people in eastern El Salvador were without water or electricity after leftist guerrillas dynamited a string of power lines. The attacks took place shortly before dawn near the towns of Nueva Granada, 68 miles east of the capital, and Rio Frio, 48 miles east. The attack left the provinces of San Miguel, Usulután, Morazán, and La Unión--almost half of the country--without electricity, and state electric company officials said repair crews had not been able to restore power through most of the area. They said they did not know when the power would be restored. Dozens of communities that depend on electric water pumps were also left without water. This attack did not affect San Salvador.

August 19, 1982

El Salvador. Leftist guerrillas dynamited a string of power lines, blacking out the eastern half of the country for the second time in less than three weeks. About 1.3 million people in the provinces of Morazán, San Miguel, Usulután, and La Paz were left without electricity. The power outage also left dozens of communities without water, gasoline, and other services that depend on electrically driven pumps. Power was not restored for six days.

August 19, 1982

Peru. A state of emergency was declared in the capital and constitutional rights were suspended after a wave of leftist bombings. The measures were taken after bombs simultaneously toppled five high-tension power lines outside the city, leaving Lima with a complete blackout. Other cities were affected as well, from Trujillo, 350 miles north of Lima, to Ica, 175 miles south, along with cities in the interior, affecting about 9 million people--half the nation's population. This was the most serious attack on the Peruvian capital in a two-year old wave of terrorism and guerrilla activity against the civilian government. Police attributed most of the more than 800 attacks since the election of President Fernando Belaunde Terry, in July 1980, to the radical Maoist group Sendero Luminoso (shining path), based in Peru's central highlands. The group declared an armed war on Belaunde's government when it took office, ending 12 years of military rule.

In raids across Lima during the blackout, terrorists tossed dynamite bombs at the Justice Palace, the Economy Ministry, and the government's Housing Bank. Other bombs were found and deactivated at the Foreign Relations Ministry. Two men were killed during the blackout, both struck by vehicles on darkened roadways. An undetermined number of people were hospitalized with burns from fires that broke out in bombed businesses. Power was not restored for two days.

August 20, 1982

Chile. Unidentified persons planted several explosive charges at a power station in the early morning in the city of Concepcion, 515 kilometers south of Santiago, causing a blackout that lasted several hours.

August 24, 1982

Chile. Five cities and towns in the neighboring region of Valparaiso suffered lengthy blackouts during the night as the result of extremist attacks against electricity pylons. Three high-voltage pylons were dynamited, causing blackouts in the cities of San Felipe, Catapilco, and Los Andes, among others.

August 24, 1982

El Salvador. Guerrillas attacked a power line with dynamite, causing a blackout of the entire Chalatenango province and the northern sections of San Salvador and Cuscatlan provinces. Some 350,000 people were affected.

August 26, 1982

Iran. Iraq claimed that its planes bombed Iran's Kharg Island, "inflicting direct and effective hits" on oil shipping installations.

The raid was described as a "reiteration of our previous warnings" to foreign freighters and oil tankers to stay away from the Iranian island, 150 miles south of the Iranian refining center of Abadan. This was the third attack in two weeks, scoring direct hits and starting fires.

Iran's export of crude oil dropped from 1.8 million to 700,000 barrels a day as a result of the Iraqi rocket and air strikes. Observers said the cutback in production was caused more by the unwillingness of oil tankers to venture near Kharg than by the damage to the terminal. The Middle East Economic Survey estimated that the tripling of British war risk insurance on vessels going to Kharg had added between \$2.45 and \$2.85 a barrel to the cost of Iranian crude oil.

August 29, 1982

El Salvador. For the second time in a week, guerrillas attacked power installations, this time in the western province of Ahuachapan, but repair crews were able to restore power a short time later.

August 30, 1982

El Salvador. Leftists attacked power lines for the third time in a week in a relentless campaign against the economic base of the country. The attacks were in northern San Salvador province and La Libertad and Chalatenango provinces, leaving 35,000 people without electricity. Authorities were not able to estimate when power would be restored.

September 2, 1982

El Salvador. In a series of bombings, leftist rebel forces attacked the country's besieged electrical system, causing a widespread blackout affecting 50 percent of El Salvador. The blackout affected such major provincial capitals as San Miguel, Usulután, and San Vicente in the eastern half of the country. It was the second time in two weeks that the guerrillas had blacked out this zone.

September 4, 1982

Iraq. Iranian planes carried out a rocket attack on the Iraqi offshore oil terminal of Khor al-Umayyah, inflicting heavy damage, according to Iranian news officials.

September 4, 1982

Persian Gulf. In its continuing war with Iran, Iraq claimed its navy and air force had sunk four ships in the Persian Gulf, including two oil tankers sailing toward Iran's Kharg Island. The freighters were struck by Iraqi warplanes near the Iranian port of Bandar-e Khomeini (formerly Bandar Shahpur). The Iraqi report quoted the military command as saying that Iraq "commenced the implementation of its warning to bomb oil tankers that approach the prohibited military zone in Kharg Island and the Iranian shores."

September 8, 1982

Iran. Iraq claimed that its warplanes bombed Iran's Kharg Island oil terminal for the fourth time in less than three weeks, scoring "direct and effective hits."

September 10, 1982

Iran. Iraqi warplanes bombed the main mooring area of the Iranian port of Bushehr in the Persian Gulf, setting fire to a large oil tanker. A military communique broadcast by Baghdad radio said the air attack occurred during the night 42 miles southeast of the main Iranian oil-loading island of Kharg. The tanker was not identified. Iran denied the report.

September 15, 1982

Iran. Iraq said its planes had attacked oil installations on Kharg Island, Iran's main oil terminal in the Persian Gulf.

September 30, 1982

United States. Five bombs were discovered after an apparent extortion attempt against a Gulf Oil petrochemical plant in Texas which shut down the plant. One of the bombs was detonated without causing any injuries. Authorities completed the shutdown of the facility after receiving a bomb threat earlier in the week and continued searching for other bombs. The Gulf facility makes petrochemical components used in plastics, cleaning materials, and solvents, all highly volatile. An unofficial source said the threat warned that 10 bombs would be detonated if a demand for \$15 million was not met in 120 hours. The source claimed the threat was a 7-page letter that specified the location of one bomb and said four others could be found easily. Those were the five bombs found. The federal bomb squad found the bombs to be very sophisticated and modern. Each device might have cost between \$18,000 and \$20,000 to build.

